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United States General Accounting Office

Report to the Chairman, Committee on  
Governmental Affairs, U.S. Senate

March 1991

# NUCLEAR NONPROLIFERATION

## DOE Needs Better Controls to Identify Contractors Having Foreign Interests



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Resources, Community, and  
Economic Development Division

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March 25, 1991

The Honorable John Glenn  
Chairman, Committee on Governmental  
Affairs  
United States Senate

Dear Mr. Chairman:

Foreign ownership, control, or influence (FOCI) over a U.S. company that performs classified work for the Department of Energy (DOE) presents a national security threat because of the potentially uncontrolled transfer of nuclear weapons-related technology or material to foreign entities. In May 1990, we agreed with your office to examine whether DOE and its Lawrence Livermore, Los Alamos, and Sandia weapons laboratories had complied with DOE's regulations and procedures designed to protect the United States against such a risk when they awarded classified contracts—contracts that require access to classified information or significant quantities of special nuclear materials as defined in 10 C.F.R. part 710.

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## Results in Brief

Overall, neither DOE nor its government-owned contractor-operated weapons laboratories fully complied with DOE's regulations and procedures for determining whether contractors are subject to foreign interests and for preventing associated risks. We estimated that about 98 percent of the classified contracts awarded at the weapons laboratories from October 1987 through March 1990 that were subject to FOCI procedures did not fully comply with those procedures. In addition, none of DOE's eight field operations offices completely complied with FOCI procedures when awarding existing management and operating contracts for operation of DOE's major research, production, and weapons facilities.

In addition to compliance problems, we found weaknesses in the regulations DOE uses to determine whether contractors are subject to FOCI. Notably, the regulations require that national security determinations be made by DOE's contracting officers rather than DOE's safeguards and security officials; the latter, however, are in a better position to make such determinations. We also found that a number of DOE's FOCI requirements are burdensome. In addition, some of DOE's regulations are inconsistent with those used by the Department of Defense (DOD) to determine whether DOD contractors are subject to FOCI. This inconsistency has

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caused confusion among contractors that do classified work with both DOE and DOD.

Finally, DOE has several internal control weaknesses that could cause further problems in safeguarding classified matter. For example, all three of DOE's weapons laboratories lacked data systems that could accurately identify all classified contracts.

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## Background

In February 1984, DOE amended its procurement regulations to obtain information on whether certain DOE contractors are owned, controlled, or influenced by foreign individuals, governments, or organizations and whether that foreign involvement might pose an undue risk to national security. Effective March 30, 1984, DOE began requiring certain entities to complete a questionnaire containing 11 questions on the degree and type of their foreign interests; this requirement applies to those prospective contractors, subcontractors, and their parent or holding companies that would have access to classified information and/or to significant quantities of special nuclear material. DOE Office of Safeguards and Security (OSS) officials are required to review the questionnaire and consult with the DOE contracting officer before the contract is awarded. According to OSS' FOCI procedures, if a prospective contractor responds positively to one or more questions—disclosing that the entity has identified a foreign interest—the questionnaire is reviewed by OSS at DOE headquarters. If the answer to all 11 questions is “no,”—signifying that the entity may have undisclosed foreign interests—then OSS delegates its review to the cognizant field safeguards and security division at the DOE operations office responsible for security oversight of the prospective contractor.

DOE's procurement regulations state that no classified contract can be awarded until DOE's contracting officer, after consulting with OSS, determines that the award will not pose an undue risk to the common defense and security of the United States. If an undue risk may exist, the prospective contractor must submit a plan of action to prevent foreign access to the classified matter. If the contractor cannot provide a plan acceptable to DOE, then the contractor cannot be considered for contract award and affected existing contracts must be terminated.

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## FOCI Compliance and Oversight by DOE's Operations Offices Were Inadequate

DOE's weapons laboratories and operations offices did not adequately comply with DOE's FOCI regulations before they awarded classified contracts. This was due, in part, to weak oversight and/or misinterpretations of the FOCI regulations by DOE's Albuquerque and San Francisco Operations Offices.

We reviewed a stratified random sample of 293 contracts from a universe of 503 contracts awarded by the three weapons laboratories from October 1987 through March 1990 that had been identified as possibly subject to FOCI procedures. On the basis of this review, we estimate that about 79 percent were subject to FOCI reviews, and of these contracts about 98 percent had been awarded, without the laboratories' fully complying with DOE's FOCI regulations and/or procedures designed to protect classified matter. For example, none of the laboratories had contacted DOE's contracting officers at the cognizant DOE operations offices before awarding contracts to companies that answered "no" to all FOCI questions. As a result, these contracts were awarded without the laboratories' obtaining the required DOE contracting officer determination that no undue risk to national security existed. Further, some classified contracts were awarded without completion of the FOCI form. We estimate that for about 15 percent of the classified contracts, the contractor did not complete the required FOCI questionnaire. In addition, contrary to DOE regulations, none of the three laboratories required individual consultants performing classified work to disclose foreign interests.

DOE's Albuquerque Operations Office, which is responsible for overseeing day-to-day operations at Sandia and Los Alamos, was lax in enforcing and following FOCI procedures. For example, although DOE's FOCI regulations took effect in March 1984, which was 6 months after DOE awarded a 5-year management and operating contract to operate Sandia, DOE's Albuquerque office did not add FOCI requirements to Sandia's contract until the contract was renewed in late 1988. DOE Albuquerque officials told us that it was an oversight not to require Sandia to follow FOCI procedures sooner.

We also found misinterpretations of FOCI regulations and/or procedures on the part of DOE officials at the laboratories and operations offices. For example, although Sandia officials were required to comply with DOE's FOCI regulations under the provisions of its 1988 contract renewal, in June 1989, DOE Albuquerque officials approved purchasing instructions used by Sandia laboratory officials to implement the new requirements which were contrary to DOE's FOCI regulations. The instructions

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did not require the DOE Albuquerque contracting officer to make a foreign interest determination in those cases where the contractor had completed the questionnaire with all "no" responses.

Similarly, DOE's Albuquerque management staff issued supplemental FOCI guidance in October 1989 that was contrary to DOE's FOCI regulations and OSS procedures and to the provisions of its 1988 contract renewal; those provisions require each classified contract to have a completed questionnaire. For example, the guidance incorrectly stated that once a FOCI questionnaire has been submitted by the prospective contractor and parent company, no additional FOCI questionnaire needs to be completed for other contracts with that company. When we notified DOE Albuquerque officials of these inconsistencies, they stated that the guidance was issued in error and rescinded it as of December 17, 1990.

Inadequate FOCI compliance efforts were not limited to DOE's Albuquerque and San Francisco offices. All eight of DOE's operations offices did not fully comply with FOCI regulations and/or procedures when awarding long-term management and operating contracts to companies that operate DOE's major facilities. Of the 37 awarded from March 1985 through December 1989 that required FOCI compliance, we found that 29, or 78 percent, were not in compliance for one or more reasons. For example, we found no foreign interest disclosure questionnaire for 15 contracts and no parent company foreign interest disclosure for 6 contracts.

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## DOE's FOCI Regulations Need Strengthening and Streamlining

DOE's FOCI regulations are not adequate because (1) the staff in the best position to know is not making the FOCI security determinations, (2) separate determinations are required for each new contract or modification, and (3) the regulations are inconsistent with those of most other federal agencies.

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### FOCI Determination Authority Resides With Contracting Instead of Security Personnel

Under DOE's acquisition regulations, FOCI determinations are made by contracting officers—individuals generally not well versed in security matters—rather than safeguards and security officials, who are in a better position to make such judgments. This practice can increase security risks, especially if the contracting officer fails to consult with OSS officials as required. For example, the DOE Contracts and Procurement Division at Albuquerque, contrary to DOE regulations, did not require its contracting officers to consult with safeguards and security

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officials for those contractors indicating no foreign interests—all “no” responses to the FOCI questionnaire. According to a senior division official, in such cases, no FOCI determination by a contracting officer is required; therefore, no consultation is needed. When we notified this official that this policy is inconsistent with DOE’s regulations, he stated that Albuquerque would immediately start to require its contracting officers to consult with safeguards and security officials for all classified contracts with contractors indicating no foreign interests on the form.

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**DOE’s Regulations Are Burdensome and Inconsistent With Those of Most Other Federal Agencies**

According to an Albuquerque Operations Office internal memorandum, fully implementing DOE’s FOCI regulations for every classified contract would significantly impede future contract actions by burdening DOE and Sandia with extensive (and somewhat needless) paperwork. Also, according to a DOE Office of General Counsel official, the DOE requirement for a separate FOCI determination for each contract modification seems excessive. We noted that many DOE contractors have more than one contract with DOE, and numerous contracts are modified several times—we found one contract awarded in 1984 with 25 modifications. In addition, each classified contract requires the company to report FOCI-related changes immediately to DOE. Therefore, we question the need for a separate determination each time a contract is modified or awarded to a company already having a classified contract with DOE.

The problems stemming from multiple classified contracts and numerous contract modifications are less likely to occur under DOD’s FOCI procedures, which are used by 20 other federal agencies, including the National Aeronautics and Space Administration; the Environmental Protection Agency; the Departments of State, Commerce, and the Treasury; and GAO. DOD’s FOCI process is not associated with specific contract awards, but is part of a contractor facility security clearance program.<sup>1</sup> DOD requires its contractors to complete a new FOCI questionnaire (1) when any significant change occurs in the information previously submitted, (2) every 5 years from the date of the last change submitted when any question has been answered yes, and (3) whenever advised that the form is required for an official purpose.

According to laboratory and DOE officials, contractors doing classified work with both DOE and DOD question why DOE does not accept a DOD

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<sup>1</sup>All DOD or DOE contractor facilities must have an approved security clearance before permitting classified matter on the premises.

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determination that no security risk exists when it awards or modifies a contract. Both the DOE and DOD FOCI questionnaires are almost identical, except that the DOD questionnaire requires more complete disclosure. DOD reviews are in some ways more complete than those at DOE. For example, DOD requests FOCI information for all parent companies, not only the ultimate parent company. DOE officials told us in December 1990 that they had recently started to review selected DOD FOCI determinations to ascertain whether they satisfy DOE requirements.

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## Internal Control Weaknesses Contributed to Potential Security Problems

During our review of DOE's FOCI controls, we found the following internal control weaknesses: (1) no efficient system to identify all classified contracts; (2) no written guidelines for making determinations; and (3) deficiencies with the FOCI questionnaire, such as obtaining relevant information from individual consultants. These weaknesses increase the risk that classified matter could be made available to contractors that are owned, controlled, or influenced by foreign governments, individuals, or organizations.

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## Lack of Information on the Number of Classified Contracts Awarded

All three weapons laboratories could not readily identify all classified contracts awarded at their facilities. Although Livermore and Sandia maintained computerized systems designed to identify all classified contracts awarded at each facility, data in these systems were incomplete. In addition, Los Alamos did not have a data system designed to identify such contracts. The following are examples of these problems:

- Livermore officials provided us a list of 82 classified contracts awarded from October 1987 through July 1990. Twenty-eight of the 82 were identified using the laboratory's computerized procurement data system, and the remaining 54 were identified by a manual search of Livermore's security files. Using other sources, including information found in the contract files, we identified an additional 20 classified contracts that were not on Livermore's original list.
- Sandia officials, using their computerized system, provided us a list of 451 classified contracts awarded from October 1, 1987, through March 31, 1990. We identified an additional 27 classified contracts that were not included in Sandia's procurement data system.
- Los Alamos officials provided us a list of 362 contracts that they said possibly involved classified matter. To determine whether a contract on the list required access to classified matter, we had to review the contract file. Fifty-seven of 108 contracts we reviewed were classified.

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Without a reliable system that can identify individual classified contracts, DOE cannot ensure that its controls for preventing foreign access to classified information or material are effective. We discussed these problems with officials at each of the weapons laboratories. At Livermore, we were told that the most likely cause of incomplete data was an error in completing the form used to enter data into the system. At Sandia, we were told that most of the discrepancies were due to a programming error used to generate the list provided GAO. Officials at Los Alamos said that prior to our request, they had not had the need for such data, but will consider adapting their current computerized system to track classified contracts.

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**OSS Has No Written Review Guidelines and Directs Limited Resources to FOCI Reviews**

DOE's OSS has no written guidelines for reviewing FOCI questionnaires and related information to determine whether awarding a contract poses an unnecessary risk to national security. The completeness and thoroughness of OSS reviews depend on the experience of the individuals conducting the review. As a result, FOCI reviews may not be consistent from contractor to contractor. In our opinion, written guidance would provide for more consistent reviews. In this regard we noted that DOD—which has been doing FOCI reviews much longer than DOE—has written guidelines for doing such reviews.

Limited resources are devoted to OSS FOCI reviews. At headquarters, for example, until August 1990, only one staff person was responsible for investigating, reviewing, and making the initial FOCI determination for all prospective contractors having identified foreign interests—40 for the first half of fiscal year 1990. In an attempt to ease this situation, headquarters has added two employees to work full-time on the FOCI review group and is in the process of hiring a FOCI program manager.

FOCI questionnaires submitted to OSS are often inadequately reviewed by cognizant field safeguards and security officials. According to an internal memorandum from the Director, OSS, on FOCI guidance and feedback, the majority of FOCI questionnaires submitted to headquarters from field units were inaccurate, incomplete, or not current. Headquarters has been completing these questionnaires (contacting the company directly to obtain the deficient information) instead of returning them to the field. This practice increased the burden on headquarters staff and delayed the award of contracts. Our review of OSS FOCI reviews from June 1984 to April 1990 for which sufficient information existed showed that they required an average of 4.5 months.

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Some corrective measures were taken during our audit. For example, in addition to hiring extra personnel to assist in OSS reviews, OSS provided the field guidance intended to ensure that FOCI questionnaires submitted to headquarters from field units are accurate, complete, and current. According to an OSS official, OSS is planning several fiscal year 1992 FOCI training courses for safeguards and security, and procurement personnel.

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**DOE's FOCI Questionnaire Is Deficient**

The FOCI questionnaire has a number of deficiencies. First, it is not designed to gather relevant information for individual consultants. Although DOE's regulations require individual consultants to disclose foreign interests when completing the questionnaire, the questions are not directed toward gathering appropriate information from individual consultants. For example, the questionnaire does not ask whether a prospective individual consultant is now or has ever been employed by or acted as a consultant for a foreign government or firm.

Second, the DOE questionnaire, unlike the DOD questionnaire, lacks a deterrent, such as DOD's notice on penalties for making false, misleading, or incomplete statements. According to DOE field office officials, they relied on contractors to truthfully disclose their foreign interests and provide accurate, current, and complete responses when completing the FOCI questionnaire. However, as the OSS internal memorandum pointed out, the majority of the questionnaires submitted to headquarters were inaccurate, incomplete, or not current. We believe adding a penalty notice similar to DOD's would help minimize incorrect responses.

Third, the questionnaire does not ask for parent firms' identities. Although DOE procedures specify that the FOCI questionnaire must be submitted by the company doing the work as well as its ultimate parent corporation, the questionnaire does not ask the company that completes the form to identify its parent company. Consequently, parent companies have not always completed the required questionnaire. To determine the extent of this problem, we checked Dun and Bradstreet records for 29 of the 90 companies included in our contractor review that answered "no" to all questions and had not provided a parent company questionnaire. We determined that 12 of the 29 companies had undisclosed parent companies that should have prepared a FOCI questionnaire.

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**Conclusions**

DOE did not adequately comply with its regulations and procedures for preventing foreign access to classified information or material. Because

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a majority of the contracts we reviewed did not comply with these procedures, we believe that it is possible DOE and/or its laboratories might have awarded a contract that could pose an undue national security risk.

While the laboratories have the authority to award contracts, it is DOE's responsibility to ensure that the laboratories follow DOE's foreign-interest procedures before awarding these contracts. It is also DOE's responsibility to follow its own regulations when awarding management and operating contracts for major research, production, and weapons facilities. DOE has fallen short of meeting these responsibilities. Further, DOE's Albuquerque and San Francisco Operations Offices, responsible for overseeing FOCI compliance efforts at the weapons laboratories, misinterpreted the regulations and did not follow them.

In addition to compliance problems found at DOE and its weapons laboratories, DOE's FOCI regulations have weaknesses and are inconsistent with those of most other federal agencies. The regulations need strengthening because they do not require safeguards and security staff members, who are in a better position to identify security risks, to determine whether an undue national security risk exists before awarding these contracts. The regulations are also inconsistent with those of most other federal agencies, causing unnecessary paperwork, contract delays, and confusion.

Finally, DOE has several internal control weaknesses that could result in national security risks by permitting foreign access to classified information. One such weakness is that the FOCI questionnaire itself does not ask appropriate questions of prospective individual consultants.

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## Recommendations

To increase the effectiveness of regulations for preventing foreign access to classified information and lessen the burdensome nature of FOCI reviews, we recommend that the Secretary of Energy revise DOE's acquisition regulations to (1) transfer FOCI determination responsibility from contracting officers to OSS personnel, (2) require a FOCI determination only before awarding a classified contract to an uncleared company, and (3) require all cleared contractors working with classified matter to update their FOCI information as directed by the OSS, or at least every 5 years.

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The Secretary should also take the following measures to provide more consistency in FOCI regulations governmentwide and strengthen DOE's FOCI internal controls:

- Explore the feasibility of entering into an interagency agreement with DOD that would result in DOE's acceptance of DOD FOCI determinations.
- Require management and operating contractors to maintain reliable computer-based systems that identify all classified contracts.
- Develop written guidelines for OSS reviews of FOCI questionnaires.
- Revise the current FOCI questionnaire to include additional questions applicable to contracts with individual consultants; a penalty notice on false, misleading, or incomplete statements; and a requirement to identify all affiliated parent companies.

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We obtained the information for this report from interviews with safeguards and security officials and procurement officials at DOE headquarters, operations offices, and laboratories. We also interviewed DOD officials concerning that agency's FOCI procedures. We reviewed the files of classified contracts awarded in fiscal years 1988 through 1990 at the three weapons laboratories. In addition, we contacted each of DOE's operations offices to obtain FOCI compliance information on all existing management and operating classified contracts. A more detailed discussion of our objectives, scope, and methodology is included in appendix I.

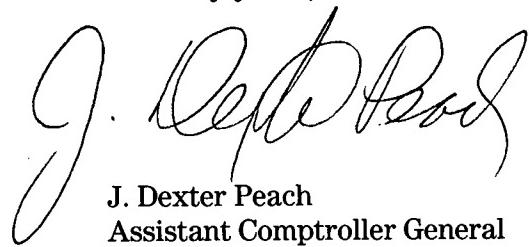
As requested, we did not ask DOE, DOD, or the laboratories to comment officially on this report. We did, however, discuss the facts in this report with DOE, DOD, and laboratory officials and incorporated their views where appropriate. In general, they agreed with the facts presented. Our work was performed between December 1989 and November 1990 in accordance with generally accepted government auditing standards.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to appropriate congressional committees, the Secretary of Energy, the Secretary of Defense, and other interested parties. We will also make copies available to others upon request.

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This work was done under the direction of Victor S. Rezendes, Director, Energy Issues, who can be reached at (202) 275-1441. Other major contributors to this report are listed in appendix II.

Sincerely yours,

A handwritten signature in black ink, appearing to read "J. Dexter Peach".

J. Dexter Peach  
Assistant Comptroller General

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## Abbreviations

DOD	Department of Defense
DOE	Department of Energy
GAO	General Accounting Office
FDAR	facility data and approval records
FOCI	foreign ownership, control, or influence
M&O	management and operating
OSS	Office of Safeguards and Security



# Objectives, Scope, and Methodology

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On October 25, 1989, the Chairman, Senate Committee on Governmental Affairs, requested that we determine (1) to what extent the Department of Energy's (DOE) laboratories purchase weapons-related and/or dual use components or technology from foreign suppliers, (2) the information that these laboratories provide to the foreign companies (both directly and through purchasing agents), (3) the type and level of review given to such procurements from a nonproliferation and technology transfer standpoint, and (4) the extent of foreign ownership of U.S. companies that do business with DOE's weapons laboratories.<sup>1</sup>

On May 10, 1990, we briefed the Chairman's office on the results of audit work performed at four DOE laboratories—Lawrence Livermore, Los Alamos, Oak Ridge, and Sandia. Because we did not find many foreign procurements at the laboratories or any incidents of sensitive information provided to foreign companies, but did find problems with DOE's procedures to identify and protect against situations in which the foreign ownership, control, or influence over DOE contractors or subcontractors may pose security concerns, we agreed to concentrate our efforts on the foreign-ownership issue. Specifically, we agreed to review the extent of compliance with DOE's contracting procedures designed to protect against an undue risk to the common defense and security of the United States when awarding classified contracts.<sup>2</sup> Such risk may result if classified information or significant amounts of special nuclear material are made available to contractors or subcontractors who are foreign owned, controlled, or influenced (FOCI) by foreign governments, individuals, or organizations.

To obtain information on DOE's compliance with its own FOCI requirements in awarding long-term management and operating (M&O) contracts to companies that operate DOE's major facilities, we contacted each of DOE's eight operations offices at the following locations: Albuquerque, New Mexico; Argonne, Illinois; Idaho Falls, Idaho; Las Vegas, Nevada; Oak Ridge, Tennessee; Richland, Washington; Oakland, California; and Aiken, South Carolina. We reviewed a copy of the FOCI questionnaire submitted by the contractor as well as its parent or holding company, and documentation showing the date of contract award for the existing

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<sup>1</sup>DOE's Lawrence Livermore National Laboratory located in Livermore, Calif.; Los Alamos National Laboratory located in Los Alamos, N.M.; and Sandia National Laboratory located in Albuquerque, N.M., are referred to as weapons laboratories.

<sup>2</sup>Classified contracts are those that require access to classified information or significant quantities of special nuclear materials. Special nuclear material is material that can be used to manufacture nuclear weapons. "Significant quantities" of this material is defined in 10 C.F.R. Part 710.

contract. Because the universe of M&O contracts requiring FOCI procedures was small—only 37 out of a possible 51 total M&O contracts—we reviewed all 37 contracts.

We also contacted laboratory procurement officials and/or safeguards and security officials at the Lawrence Livermore, Los Alamos, and Sandia National Laboratories to gather information on FOCI procedures used by the laboratories and to request a list of classified contracts awarded from October 1, 1987, through March 31, 1990, to determine whether the laboratories were complying with DOE's FOCI requirements.

- Livermore officials identified 82 classified contracts awarded from October 1987 through July 1990. We excluded 12 contracts that were (1) awarded to M&O contractors and/or M&O parent companies because these companies were examined in our review of DOE's compliance with its own FOCI requirements in awarding long-term M&O contracts and (2) awarded after March 31, 1990. Of the remaining 70 contracts, 18 for fiscal year 1988, 29 for 1989, and 23 for 1990, we reviewed a random selection of 38 or 54 percent.
- Los Alamos officials identified 362 contracts that they said possibly involved classified matter for this time period. These officials were unable to provide us a list of classified contracts because they lacked a system designed to identify such contracts. To determine whether a contract on the list required access to classified matter, we reviewed the contract file. We excluded 213 contracts that were (1) contracts awarded to M&O contractors and/or M&O parent companies, (2) contracts awarded after March 31, 1990, or before October 1, 1987, (3) duplicate contracts already identified in other fiscal years, and (4) contracts with government agencies. Of the remaining 149 contracts, 81 for fiscal year 1988, 44 for fiscal year 1989, and 24 for fiscal year 1990, we reviewed all but one fiscal year 1989 contract (Los Alamos officials were unable to locate one contract), all 1990 contracts, and a random selection of 41, or 51 percent, of fiscal year 1988 contracts.
- Sandia officials identified 451 classified contracts for this period. We excluded 194 contracts that were (1) awarded to M&O contractors and/or M&O parent companies, (2) awarded to government agencies because these do not require FOCI procedures, and/or (3) unclassified contracts that had inadvertently been included on the list. Of the remaining 257 contracts, 60 for fiscal year 1988, 126 for 1989, and 71 for 1990, we reviewed a random selection of 131, or 51 percent.

We reviewed each contract file to determine whether access to classified matter was required, and, if so, whether (1) the contractor completed

the FOCI questionnaire or certified that it had previously answered the foreign-interest questions and (2) the DOE contracting officer, after consulting with DOE's Office of Safeguards and Security (OSS) or the cognizant field safeguards and security director, had made a foreign-interest determination before awarding the contract.

To examine whether all classified contracts had been identified, we reviewed facility data and approval records (FDAR) maintained at DOE's San Francisco and Albuquerque Operations Offices' safeguards and security divisions. Although the FDAR did not provide complete information on all classified contracts, it served as a rough means to check the completeness of the information provided by the weapons laboratories on classified contracts. We identified 47 contracts requiring FOCI procedures that were not identified by the laboratories. Twenty of these contracts should have been included on Livermore's original list, but because of time constraints we were unable to include these files in our statistical sample of contracts reviewed for compliance with FOCI procedures. The remaining 27 contracts should have also been included on Sandia's original list and were added to that list before we took our statistical sample. As a result, 16, or 59 percent, of these contracts were selected for our review for compliance with DOE's FOCI requirements. Nevertheless, our review of the weapons laboratories' computerized data systems was limited to testing the reliability of the data system. We did not determine the cause of any deficiencies found.

We also reviewed files maintained by DOE's OSS on companies that had responded with at least one "yes" to their FOCI questionnaire. OSS officials provided us a list of 202 companies, from which we excluded 15 companies that were M&O contractors and/or M&O parent companies and 1 company file OSS could not locate. Of the remaining 186 companies, we reviewed a random selection of 78, or 42 percent, to determine (1) the extent and type of foreign interest, (2) the average time DOE takes to make an FOCI determination, and (3) how often OSS decided it was necessary to recommend that the cognizant DOE contracting officer impose restrictions on prospective or existing contractors to mitigate security risks.

To obtain information on DOE's FOCI process and how it compares with the Department of Defense's (DOD) procedures, which are followed by most other agencies, we contacted (1) DOE headquarters officials at the Office of General Counsel and at OSS and (2) DOD officials at the Office of Industrial Security and at the Defense Investigative Service. We

reviewed DOE's acquisition regulations setting forth the broad FOCI policies and requirements for contractors, and OSS' specific procedures for reviewing FOCI submissions, to determine DOE's regulations and procedures for obtaining, reviewing, and making FOCI determinations. We also reviewed DOD's Industrial Security Manual for Safeguarding Classified Information and applicable excerpts of its Industrial Security Regulations addressing DOD's FOCI policies and procedures.

Since we developed our estimates using a sample (called a probability sample) of classified contracts awarded by the weapons laboratories and files maintained by OSS on companies that had responded with at least one "yes" to their FOCI questionnaire, each estimate has a measurable precision called a sampling error, which may be expressed as a plus or minus figure. A sampling error indicates how closely we can reproduce from a sample the results that we would obtain if we were to take a complete count of the universe using the same measurement methods. By adding the sampling error to and subtracting it from the estimate, we can develop upper and lower bounds for each estimate. This range is called a confidence interval. Sampling errors and confidence intervals are stated at a certain confidence level—in this case, 95 percent. For example, a confidence interval, at the 95-percent confidence level, means that in 95 out of 100 instances, the sampling procedures we used would produce a confidence interval containing the universe value we are estimating. In one instance, a slightly different estimating technique was used. This technique does not provide symmetric confidence intervals. Table I.1 through I.3 show the results of our review of contract files at each of the weapons laboratories used in our probability sample. Table I.4 shows the statistical estimates used in this report and their associated confidence intervals.

**Table I.1: Results of Contracts Reviewed at Lawrence Livermore National Laboratory**

Contracts	Fiscal year			Total
	1988	1989	1990	
Total universe	18	29	23	<b>70</b>
Sample size	13	14	11	<b>38</b>
In compliance	0	0	0	<b>0</b>
Not in compliance	13	12	5	<b>30</b>
Not applicable	0	2	6	<b>8</b>
No FOCI questionnaire <sup>a</sup>	0	1	0	<b>1</b>

<sup>a</sup>Included in "not in compliance" values.

Source: GAO review of Lawrence Livermore classified contracts.

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**Appendix I**  
**Objectives, Scope, and Methodology**

**Table I.2: Results of Contracts Reviewed at Los Alamos National Laboratory**

Contracts	Fiscal year			<b>Total</b>
	<b>1988</b>	<b>1989</b>	<b>1990</b>	
Total universe	81	44	24	<b>149</b>
Sample size	41	43	24	<b>108</b>
In compliance	1	0	0	<b>1</b>
Not in compliance	12	21	18	<b>51</b>
Not applicable	28	22	6	<b>56</b>
No FOCI questionnaire <sup>a</sup>	2	1	1	<b>4</b>

<sup>a</sup>Included in "not in compliance" values.

Source: GAO review of Los Alamos classified contracts.

**Table I.3: Results of Contracts Reviewed at Sandia National Laboratories**

Contracts	Fiscal year			<b>Total</b>
	<b>1988</b>	<b>1989</b>	<b>1990</b>	
Total universe	74	136	74	<b>284</b>
Sample size	38	69	40	<b>147</b>
In compliance	1	1	1	<b>3</b>
Not in compliance	37	68	37	<b>142</b>
Not applicable	0	0	2	<b>2</b>
No FOCI questionnaire <sup>a</sup>	4	11	11	<b>26</b>

<sup>a</sup>Included in "not in compliance" values.

Source: GAO review of Sandia classified contracts.

**Table I.4: Statistical Estimates and Associated 95-Percent Confidence Intervals**

Description of estimate	Estimate	Interval bounds	
		<b>Lower</b>	<b>Upper</b>
Contracts subject to FOCI procedures	79%	77%	81%
Contracts not complying with FOCI	98	97	99
Contracts without a FOCI questionnaire	14.5	11.5	17.5
Contracts requiring a proxy agreement <sup>a</sup>	1.3	0.3	5.6
Average OSS FOCI processing time in months	4.5	3.9	5.1

<sup>a</sup>Under a proxy agreement, foreign owners appoint U.S. citizens proxy holders, who have the same rights and authority as stockholders.

Source: GAO analysis of contract and OSS reviews.

We discussed the facts in this report with DOE, DOD, and weapons laboratory officials and incorporated their views where appropriate. As requested, we did not ask DOE, DOD or the laboratories to comment officially on this report. Our work was performed between December 1989 and November 1990 in accordance with generally accepted government auditing standards.

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